Amendments to the Specification

The specification is being amended to correct typographical and clerical errors. No new subject matter is being added.

Please replace the paragraph on page 2, at lines 2-4, with the following rewritten paragraph:

The present application is a continuation-in-part of co-pending U.S. Patent Application Serial No. 09/766,879, filed January 19, 2001, now U.S. Patent No. 6,697,652, issued February 24, 2004. The entire contents of the above application is incorporated herein by reference.

Please replace the paragraph on page 8, at lines 12-26, with the following rewritten paragraph:

Measurements are performed, for example, using a fast excitation-emission matrix (EEM) instrument 10 that has been described in greater detail in U.S. Application No. 09/238,664, filed January 26, 1999, now U.S. Patent No. 6,537,211, issued March 25, 2003, the entire contents of which is incorporated herein by reference. The excitation light source of this fast-EEM system can include a nitrogen laser 12 emitting at 337 nm (Laser Science, Inc., Franklin, MA; Model: VSL-337MD) pumping 10 dye cuvettes precisely mounted on a rapidly rotating wheel 16. In this manner, in a preferred embodiment, eleven different excitation wavelengths are obtained between 337 and 620 nm and coupled using optical system 18 into the delivery fiber of a 1 mm diameter optical fiber probe 20. For the reflectance measurements, white light (350-700 nm) from a Xe flash lamp 14 (Perkin Elmer Optoelectronics, Salem, MA) is coupled into the same probe. Alternatively, for other embodiments involving measurements in the bladder, for example, a XeCl excimer laser emitting at 308 nm can be used. In a preferred embodiment, the probe is composed of six collection fibers 28 surrounding the central light delivery fiber 26, and it is covered with a protective, transparent optical shield at the distal end 22 as shown in Figure 1.

Please replace the paragraph on page 11, at lines 1-15, with the following rewritten paragraph:

A small fraction (2-5%) of the detected reflected light originates from light collected by the probe after being scattered only once by the tissue. This method described generally herein as light scattering spectroscopy is described in greater detail in U.S. Patent No. 6,091,984, issued on July 18, 2000, the entire contents of which is incorporated herein by reference. Additional methods for measuring tissue structure are described in International Application No. ~~PCT/US98/2145~~ PCT/US98/21450, filed on October 9, 1998, now WO99/18845, published on April 22, 1999, designating the United States, the entire contents of which is also incorporated herein by reference. The intensity of this singly-scattered light contains a component which is periodic in inverse wavelength, the magnitude and frequency of which depends on the number and size of the nuclei in the epithelial cell layer. This periodic signal is analyzed to determine the number and size of epithelial cell nuclei corresponding to a particular site. Logistic regression and cross-validation are then used to compare the spectroscopic classification with that of histopathology. To optimize sensitivity and specificity, the posterior probability threshold for separating high-grade dysplasia from non-high-grade dysplasia sites is set to 0.3 in one preferred embodiment.